Healthcare-associated Infections Advisory Committee Meeting
November 17, 2011 Meeting by Webinar 10:00am-1:30pm

Meeting Summary

Attendance

Members Present: Kim Delahanty (Chair)*, Mike Butera*, Enid Eck,* Annemarie Flood*, Mike MacLean, Carole Moss, Debby Rogers,* Dawn Terashita, Lisa Winston*, Kathy Wittman*

Guests Present: Lia Estadi, Sherilyn Fagan, Julia Hallisy, Lisa McGiffert, Amber Mitchell, Gina Newman, Daniela Nunez, Shilla Patel, Ann Petru

Members Not Present: Alicia Cole, Michael Langberg, Mary Mendelsohn, Roberta Mikles, Frank Myers, Shannon Oriola, David Witt

Department Staff: Lynn Janssen, Cheryl Kalson, Trish McLendon, Jorge Palacios, David Paniagua, Jon Rosenberg

***Call-in from a private (nonvoting) location

Agenda Item/Discussion
Call to Order and Introductions HAI-AC Chair Kim Delahanty convened the meeting. As this meeting was conducted by webinar, members were requested to identify themselves. Guests were advised that identifying themselves was optional. It was determined that there was no quorum for this meeting. The Chairperson stated that the California State restriction on travel necessitated conducting the meeting by webinar.
Public Story There was no public story for this meeting.
Review of Rules of Order The Chairperson briefly reviewed the active rules of order used by the HAI-AC, including following the queue, speaking clearly, respecting speaker opinions, muting phones if on the teleconference line, limiting comments to two minutes, and, in the interest of time, not rephrasing statements which have already been made. The HAI Advisory Committee's mission is to give recommendations to CDPH on implementing the statutory mandates for prevention of--and the associated morbidity and mortality from--HAIs. The Committee is neither a regulatory nor a punitive body. The public will be invited to comment after each topic today.

Approval of Meeting Summaries

The meeting summaries were not available for this meeting; Departmental approval is pending.

Program Update

Personnel--Dr. Rosenberg welcomed new HAI Program staff member Karla Van Meter, PhD., an epidemiologist who joined the HAI Program in September. Karla has been charged with managing the compilation and data that was generated for the SSI report from the NHSN module and the quarterly paper reporting forms. The SSI report is currently undergoing departmental review. At this meeting the HAI Program will share the plan for data presentation to the public.

The HAI Program Epidemiology Unit, along with Jorge and Cheryl, have been responsible for the planning and production of the public reports that will be completed no later than the first week in January, including SSIs, CDI, MRSA, VRE BSI, and CLABSI. A CLABSI report presentation is not on the agenda today as this reporting plan, based on the Metrics Working Group recommendations, was presented and endorsed by a majority of the members at the June 2011 HAI AC meeting.

Liaison Team--Lynn Janssen reported that the Liaison Team completed data validation with 100 hospitals and is working on an analysis of the data through November 2011. The Team also completed 11 two-day infection control basics training courses that were offered without charge and developed in collaboration with the California APIC Coordinating Committee (CACC). Plans for next year are currently in the works.

Meeting Summaries and Bylaws--Dr. Rosenberg acknowledged that release of the meeting summaries from the June 9 and September 1 meetings have been delayed, pending approval. HAI Program staff will look into how to expedite this process so that members may review and approve the summaries as soon as possible, and with adherence to the directives of the Bagley-Keene Act. The members were also advised that the proposed bylaws are currently with the CDPH Director; approval is pending.

Public Reports Presentation—Jon Rosenberg/Trish McLendon

Surgical Site Infections in California General Acute Care Hospitals—January 2009 through March 2011 (Paper Reporting Forms)
(Please refer to the attached PowerPoint Slides)

(Ref: Table 1): The SSI data will be shown in a single table indicating the total number of surgeries and surgical site infections for three defined categories and in the reporting forms that were used to collect this information, as specified in SB 1058. As hospitals were given the option of reporting either by paper forms or NHSN, HAI Program epidemiology staff had to determine by which method each hospital chose to report and to ensure against double-reporting. In the event that a hospital did double-report, the data from the paper form was used. If hospitals indicated they had entered their data through the NHSN module, that data was added to the data on the paper forms. The majority of hospitals used the paper form only. A considerable amount of effort was made to ensure that all the information was properly compiled.

Discussion: The question was raised as to whether the table should include an explanation as to why only deep/organ space SSIs is being reported. However, for the purposes of the presentation the table is only an example of what the reporting table will look like and how the data will be presented and does not comprise the entire report. (A text report will be provided to the public as well.) The CDI and MRSA, and VRE BSI report presentations will be examples only as well.

Two separate reports are slated for release at the end of 2011: the paper form, which reflects data submitted from January 1, 2009 through March 31, 2011, and a second report, which will be generated from NHSN data submitted from April 1, 2011 through June 2011.

To make the reports more consumer-styled, the HAI Program will create a master table for the public as a starting point to locate their hospital, a specific infection, and to determine whether a hospital has a report. The sort function will be by city or county. In the future, the master table may be map-based.

Surgical Site Infections in California General Acute Care Hospitals—April 2011 through June 2011 (NHSN SSI module Reporting)
(Please refer to the attached PowerPoint Slides)

(Ref: Slide 1): There is a new risk adjustment tool available through NHSN. In place of the old categories, NHSN is now using a math-based model which is different for each procedure. Variables such as underlying disease, blood loss, patient's body mass, or age will be mathematically risk-adjusted.

This report will cover those infections that are deemed compliant with AFL 11-23. NHSN will not calculate a SIR unless the infection rate is at least 1, and there are a range of procedures that hospitals have to perform to generate an SIR.

(Ref: Slide 2): CDPH is exploring the possibility of taking key tables from these reports and displaying them on web pages in addition to the PDF. Although not critically necessary, it would be nice to feature the data presentation without the text.

There will be a second mode of presentation of the SSI data in January 2012. The HAI Program has partnered with the California Healthcare Foundation (CHCF) to develop an interactive map which will include a table of hospitals that can be scrolled through. Epidemiological terms and methods used in data analysis (e.g., SIR and Confidence Interval) will be explained. Major surgical procedures will be depicted by tabs at the top of the map: CABG, Hip, Knee, and Colon. The map will feature color-coded dots which will indicate whether data is available for those particular procedures. Therefore, the public will have two options for accessing SSI information for the current reporting period. The collaboration is part of CHCF's data transparency initiative to help us enhance the ability of the public to locate healthcare quality information that they are interested in.

Discussion: It was noted that very few hospitals in California do CABGs. If a hospital has no data for CABG-related surgical site infections does this imply that they don't perform that procedure or that they have not submitted data? Currently, if a hospital doesn't have a Standard Infection Ratio (SIR) it does not differentiate between the two interpretations. The HAI Program intends to address this issue with the CHCF team.

It will be important for the HAI Program to receive input from the public regarding the SSI map. However, as the HAI Program is operating under a very tight design and programming timeframe enhancements will have to be instituted at a later date.

It was suggested that the interactive map include information for consumers regarding which hospitals are noncompliant. Although this issue will be discussed in the written report, there is currently no way of discerning the different between hospitals that didn't report as opposed to those that don't perform a particular procedure.

The HAI Program plans to discuss with the Office of Public Affairs (OPA) a public awareness strategy for the reports, which may include a public reporting function. The Public Reporting and Education Subcommittee are interested in meeting with OPA to discuss within the next couple of weeks.

Mandatory Public Reporting of *Clostridium difficile* Infections in California General Acute Care Hospitals—April 2010 through March 2011

(Please refer to the attached PowerPoint Slides)

(Ref: Slide 4): CDI cases are defined as Hospital Onset (HO), Community Onset Hospital Associated (COHA), or Hospital Associated (HA). These definitions are used by NHSN.

(Ref: Slides 9 & 10): The HAI Epidemiology Unit determined that 10 months of reporting provided sufficient data. Long-Term Acute Care (LTAC) hospitals have a much longer length-of-stay than General Acute Care Hospitals (GACH), which affects CDI rates; therefore, they have been separated.

(Ref: Slide 11): Facilities are now able to designate their testing methodology for CDI. Although this did not occur in time for the current report, methodology will be available for future reports. There is also no risk adjustment method for community-acquired CDI at this time; therefore, the public will be advised not to compare hospitals. There may be a risk adjustment method available from NHSN in 2012.

Discussion: The question was raised as to why the number 10,000 was used in the analyses of the HO and HA Incidence rates. This is a standard risk adjustment method for CDI and is used by NHSN.

There was also some concern about the Hospital Associated (HA) metric, as patients may have had exposure in another setting. Although possible, it is unknown as to whether or not a patient's CDI is truly related to a previous hospital admission. Therefore, the report will include a clearly-stated caveat that an infection could have developed during outside care. Given the statutory language, the HAI Program cannot elect to *not* report an infection because some of the cases may be related to outside care. In the future, CDC will most likely develop an SIR which will further guide the HAI Program in data reporting in 2013.

This is the first statewide report of CDI's in the United States. In June, New York State was the first to report CDI's through NHSN but it was a pilot sample of 117 hospitals. Although a substantial number, the report does not include every hospital in New York State. New York reported all 3 measures (Community Onset, Hospital Onset, and Hospital Associated), and showed the rates and confidence limit on a graphic for Hospital Associated and Hospital Onset. They termed Community Onset, "NMH" (Not My Hospital). Hospital Associated was termed "PMH" (Possibly My Hospital).

For the CDPH report, Hospital-onset and Hospital-associated rates will be based on a one-year total for data reported for 10, 11, or 12 months. Any hospital reporting <12 months will be labeled, and they are small in number; a table specifically listing all hospitals reporting <10 will be included. The goal for next year is to ensure that every hospital reports for the entire 12 months.

The HAI Program is providing the public with technical data for this report, but is also exploring ways to further clarify the information so that the public has a thorough understanding of what they are viewing. Although not a part of the statutory mandate, the HAI Program would like to look at issues as admitting diagnoses and nursing home admissions, when more resources are available.

A member suggested that the report can provide an opportunity to link important educational information to the CDI report. For example, an explanation as to how using leftover antibiotics from the medicine cabinet contributes to the overall disease burden of CDI. There is a role for the patient in helping to alleviate this burden.

The potential problem of double-counting during a reporting period was discussed. If a patient is admitted to hospital A and given antibiotics, then discharged home but then admitted to hospital B with Community Onset CDI, then that will not be counted as hospital-associated as the patient was not discharged during the previous two weeks from hospital A. There will be no risk of double-counting in an inpatient setting. Outpatient testing presents its own challenges in relation to the NHSN system. The system works well when testing is appropriate but as soon as physicians start ordering—and labs start performing—excessive testing or tests in patients who are no longer symptomatic for CDI (i.e., no longer presenting with diarrhea), problems will arise. One of the reasons

this is happening is that nursing homes or other LTCFs are pressuring hospitals to do a test of care or a test of clearance if they know the patient had CDI before being admitted or transferred back to the nursing home. One of the consequences of excessive testing is that hospital rates are going to be elevated because of the results of some of that testing. The system works well only when the testing is appropriate. CDPH has issued an AFL to say that LTCFs should not request CDI testing and hospitals should not be performing unnecessary CDI testing.

Dr. Rosenberg clarified that hospital onset CDI parameters are now based on three calendar days, as opposed to 72 hours. On the 4th day the CDI is considered hospital onset and on the 3rd day it is deemed community onset. This is based on data from CDC showing that the number of patients who are misclassified by using 48 or 72 hours vs. calendar days is very small and not worth the effort. For example, if someone was admitted just before midnight on November 1, it would be calendar day to calendar day. This is based on when the sample was obtained, not when the test was performed in the lab. Changing to calendar days is one of the first of what will be a series of what NHSN terms "denominator simplification." NHSN recognizes the significant workload of classifying patients by their denominator status, based on a variety of different variables, such as counting line days every day in every area of the hospitals, including weekends. So they are looking at ways in which these measures can be simplified with minimal effect on the integrity of numbers that are produced. If reporting increases with further CMS mandates, the need to simplify these measures is going to be even more crucial.

MRSA and VRE BSIs
(Please refer to the attached PowerPoint slides)

(Ref: Slide 1): This will be the first report of incident rates using NHSN data. Currently, there are no other states who have reported BSI data hospital-wide. As opposed to CDI, but more similar to CLABSI, the HAI Program will be using a risk stratification method that will allow, with caution, rate comparisons between hospitals.

(Ref: Slide 3): Hospitals that were missing data reporting information received a very specific message as to what specifically they were missing. It was up to each hospital to make the corrections to NHSN.

(Ref: Slide 4): MRSA or VRE isolate from blood in a patient with no prior positive blood culture for $\leq$ 2 weeks. This is because it's uncommon for a patient with a bloodstream infection to have continued positive blood cultures for up to 2 weeks and not have a recurrent infection. It's much different from CDI (which is cut off at 4 weeks), so it's appropriate to test a patient to see if the blood culture is positive. CDPH is looking at hospital onset only.

(Ref: Slide 5): In NHSN, each hospital self-identifies by teaching classification, including "major teaching" or "graduate teaching. However, the only category that currently lends itself to risk stratification is "major teaching" status. When CDPH looked at the NHSN self-identification data it became apparent that there was a major misclassification problem. There were university hospitals listed that were not classified as "major teaching," and there were 100-bed community hospitals without a graduate problem that classified themselves as "major teaching." HAI Program staff contacted hospitals, identified the categories, and asked them via NHSN and email response to notify the HAI Program if they believed they were classified correctly or not and if not, what the appropriate classification is and what the basis is for that decision. In a number of cases, the HAI Program worked with hospitals to help them determine whether they met the criteria for "major teaching" hospital, which is defined as a facility that is affiliated with a medical school but which has a majority of medical students rotating through multiple clinical services. At the end of this process the HAI Program discovered that of the 19 self-identified "major teaching" hospitals about half of those were previously misclassified in other categories and half of the hospitals previously categorized as "major teaching" were switched. New York State and Tennessee also went through this process. We have notified NHSN that this is most likely a widespread problem in other states.

Unfortunately, LTACs are not a licensing category, so through CMS data and our own staff who work with these hospitals we have identified 23 hospitals that are LTACs. All are free-standing facilities. It is possible to have an LTAC within a hospital, in which case that facility would then be part of the GACH data set. We are aware of only one of them in California. LTACs are classified by CMS in that they are not a licensing category so they are considered a GACH under L&C licensing and they receive a different level of reimbursement. And of course, they provide a different level of care. The HAI Program had to do the work to identify the LTACs in California.

(Ref: Slide 6): This slide shows the data presentation of organizations. The report will show the number of infections, patient days, and incidence rates. A 95% confidence interval will be used and the hospitals stratify dramatically by pooled rates of infections. This doesn't mean that every hospital within each one of the strata is exactly the same as every other hospital as far as risks for these infections. At this point, all that can be done is to stratify by the existing categories. Hospitals in the "other" category can be quite different from one another, so for that reason the case index will be included. Although nothing has been done with the case statistically, it allows the viewer to see that a hospital such as City of Hope, for example, has a much higher case mix index than other hospitals within those particular strata.

(Ref: Slide 7): The formula for statistical analysis is a simple one involving the incidence density rate and the reported incidence rate for hospital-onset BSIs.

(Ref: Slides 8 & 9): There will be a pooled mean for the rate of all the hospitals within the categories. The pooled mean represents the average rate for infections in one particular group and becomes a benchmark for comparison of hospitals within that group, although not with each other. Interestingly, the case mix index for pediatric hospitals is high but their rates for BSIs are much lower than other hospitals. This indicates that there are other factors that apply to pediatric patients other than severity of illness that account for their different degree of risk for MRSA and VRE BSIs.

There will be a second, identical table for VRE.

(Ref: Slide 10 & 11): Table 5 is an example of what pediatric hospital-specific rates will look like. All 12 pediatric hospitals reported 12 months of data. Table 11 depicts hospitals which reported less than 10 months. Approximately 94% (383) hospitals reported at least 10 month's worth of data and we are moving towards 100% reporting.

(Ref: Slide 12): Unfortunately, there are limitations to this reporting. Although there is a target for 25% reduction, there is no national benchmark and NHSN has not yet published information about the rates of MRSA or VRE BSI. MRSA is expected at any time and may be available by the time this report is released. Also, stratification by hospital type may not account for all the differences in patient populations within these categories, particularly in the case of "Other," which has a very wide range of rates. At this point we cannot say whether these differences in rates will reflect differences in how hospitals use the definition of BSI, if they reported all the lab information correctly, or whether there are, in fact, very real differences in rates, which might reflect differences in preventative practice.

Discussion: The "Other" category name needs to be changed. Dr. Rosenberg acknowledged that several individuals had pointed this out. Several suggested that it be changed to "Community Hospital" The HAI Program is requesting suggestions for renaming this facility category.

An advisory committee member questioned whether CDPH was tracking whether the MRSA bacterial strains were hospital- or community-acquired. At this point there does not appear to be any recent reports on community strains being a major problem in hospital-onset cases but a new study could be released at any time. There are hospitals that are looking out for this but not seeing an incursion of community strains along with the hospital strain.

The CDC conducted a study which they believe is representative of the population, although it is not a national study. Through an active surveillance process CDC observed that there was a 34%

decrease over rates of hospital onset MRSA BSIs from 2005-2008.

Although it's not part of the mandate and resources are not available at this time, CDPH is interested in examining the interrelationship between CLABSI data and MRSA BSI data.

The Future of the HAI Advisory Committee

Several members were interested in knowing in what direction the HAI AC will move towards in 2012. Dr. Rosenberg stated that the CDPH Director's Office is very aware of the Committee and its status, and would like to resolve any uncertainties and move forward. CDPH will do everything possible, given the Governor's travel directive, to have a face-to-face meeting. One approach, as was discussed in the past, is to hold the Advisory Committee meeting in Oakland. The site is 10-15 minutes from Oakland Airport with limited traffic issues. Holding a meeting in Oakland will address the issue of program staff travel.

Several of the members voiced their support for moving the meetings to Oakland and strongly encouraged the HAI Program to explore this option. The members feel that in-person meetings are critically important, particularly as they have specific questions regarding the future of the HAI Advisory Committee.

Title 22 Subcommittee Update – Annemarie Flood (Chairperson), Kathy Wittman
(Please refer to the attached PowerPoint slides)

The Subcommittee has met several times to review a section of two of the regulations at each meeting and brainstorming language suggestions and references to support the language. Lee Cuen, RN, from CDPH Licensing and Certification sits on the Subcommittee as an advisor and has provided valuable input.

The Subcommittee learned that they did not have to rewrite the Health and Safety Code into Title 22 if prescriptive and descriptive language existed in the Code. Topics that have been covered to date: MRSA testing, Infection Preventionist definition, and staffing ratios.

The Subcommittee determined that many of the statues rely on a strong risk assessment and that risk assessment language should stress the requirement to use evidence-based references when identifying needs and resource allocation for an infection control program. MRSA surveillance, infection prevention, and resources are all based on the risk assessment. (Refer to the attached documents, *California Health and Safety Code 1288.45(d)* and *Reference: MRSA*.)

There is really nothing available regarding surgical risk, although the Subcommittee wants to bring it back to the risk assessment. Regarding the policy for retesting, previously known positives are not required to be retested on discharge but it's not so clear in the law on testing on admission. When the pre-discharge testing is performed, but as the patient has already been discharged, the hospital will be required to contact the patient's primary care physician with the test results.

The Title 22 Subcommittee is currently on hiatus and will reconvene in early 2012.

HAI Advisory Committee Concerns – Kim Delahanty

HAI Advisory Committee member Dr. David Witt had sent an email stating several issues for discussion between CDPH and the HAI AC:

- What is the authority of the Advisory Committee?
- How will the agenda for future meetings be developed?
- What is the future role of the HAI Advisory Committee?
- Several committee members have resigned for various reasons. The concern is that without a clear mission and a clear authority the Advisory Committee may lose additional dedicated members.

Dr. Rosenberg stated that the Advisory Committee Bylaws, which will address many of these questions, are still on hold, and that he will discuss with the Chief Deputy Director within the next week or so. Dr. Rosenberg stated that Deputy Director Kathleen Billingsley was present at the onset of the formal Advisory Committee and greatly values the Committee and the need to retain the expertise and dedication to continue the work. Ms. Billingsley wants to do everything she can to not only maintain, but to invigorate the Committee as it reconfigures according to the bylaws.

Action Items

- The HAI Program will research ways to expedite the June and September meeting summaries for HAI AC member review with adherence to Bagley-Keene directives
- The HAI Program will discuss with OPA a request from the Public Reporting and Education Subcommittee to meet with OPA to provide input for a public awareness strategy for infections reporting release.
- HAI AC members will submit suggestions to the HAI Program for renaming the Facility category “Other” in the MRSA and VRE BSI reports.
- The HAI Program will investigate having the next HAI AC meeting at a state-owned facility in Oakland, California.
- A discussion regarding the future direction of the HAI AC will be included as an agenda item for the next HAI Advisory Committee meeting

Future Meetings

The date and location of the next HAI AC meeting is currently pending.

Acronyms

AFL	All Facilities Letter
APIC	Association of Professionals in Infection Control
CABG	Coronary Artery Bypass Graft
CACC	California APIC Coordinating Council
CDC	Centers for Disease Control and Prevention
CDI	Clostridium *difficile* Infection
CDPH	California Department of Public Health
CHCF	California Health Care Foundation
CLABSI	Central Line Associated Blood Stream Infection
GACH	General Acute Care Hospital
HA	Hospital Associated
HO	Hospital Onset
HAI AC	Healthcare Associated Infections Advisory Committee
LTAC	Long Term Acute Care Hospital
MRSA	Methicillin Resistant Staphylococcus Aureus
NHSN	National Healthcare Safety Network
OHA	Other Hospital Associated
OPA	Office of Public Affairs
SIR	Standard Infection Ratio
SSI	Surgical Site Infection
VRE BSI	Vancomycin Resistant Enterococcus Blood Stream Infection